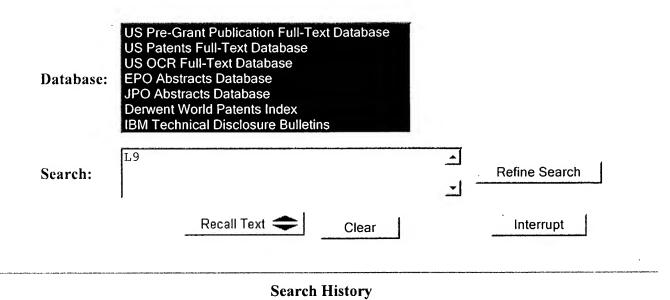
WEST Refine Search Page 1 of 1

Refine Search

Search Results -

Terms	Documents
L2 and (dry adj powder)	20



DATE: Wednesday, May 10, 2006 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB, U	JSPT, USOC, EPAB, JPAB, DWPI, TDBD; PLUR	=YES; $OP=OR$	
L9	L2 and (dry adj powder)	20	<u>L9</u>
DB=PGPB, U	JSPT; PLUR=YES; OP=OR		
Ľ8	Joseph near Sulner	4	<u>L8</u>
<u>L.7</u>	Rodney near Woods	26	<u>L7</u>
L <u>6</u>	solomon near Steiner	29	<u>L6</u>
DB=PGPB, U	JSPT, USOC, EPAB, JPAB, DWPI, TDBD; PLUR	=YES; $OP=OR$	
L5	solomon near Steiner	42	<u>L5</u>
L4	L3 and (dry adj powder)	13	<u>L4</u>
Ľ3	L2 and diabetes	115	<u>L3</u>
<u>L2</u>	L1 and diketopiperazine	172	<u>L2</u>
<u>L</u> 1	insulin	76876	<u>L1</u>

END OF SEARCH HISTORY

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Day: Wednesday

Date: 5/10/2006 Time: 23:00:15

Inventor Name Search

Enter the **first few letters** of the Inventor's Last Name. Additionally, enter the **first few letters** of the Inventor's First name.

Last Name	First Name	
Woods	Rodney	Search

To go back use Back button on your browser toolbar.

Back to PALM | ASSIGNMENT | OASIS | Home page

PALM INTRANET	r

Day: Wednesday

Date: 5/10/2006 Time: 23:00:15

Inventor Name Search

Enter the **first few letters** of the Inventor's Last Name. Additionally, enter the **first few letters** of the Inventor's First name.

Last Name	First Name	
Sulner	Joseph	Search

To go back use Back button on your browser toolbar.

Back to PALM | ASSIGNMENT | OASIS | Home page

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Day: Wednesday

Date: 5/10/2006 Time: 23:00:15

Inventor Name Search

Enter the **first few letters** of the Inventor's Last Name. Additionally, enter the **first few letters** of the Inventor's First name.

Last Name	First Name	
Steiner	Solomon	Search

To go back use Back button on your browser toolbar.

Back to PALM_ ASSIGNMENT | OASIS | Home page

(FILE 'HOME' ENTERED AT 21:01:16 ON 10 MAY 2006)

	FILE 'CAPLU	JS, MEDLINE' ENTERED AT 21:01:25 ON 10 MAY 2006
L1	395176	S INSULIN
L2	38	S L1 AND DIKETOPIPERAZINE
L3	2	S L2 AND (DIKETOPIPERAZINE (10A) (FUMARYL OR SUCCINYL OR MALELY
1.4	2	DUPLICATE REMOVE L3 (0 DUPLICATES REMOVED)
1.5	31	DUPLICATE REMOVE L2 (7 DUPLICATES REMOVED)

1.4ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

TΙ Diketopiperazine salts for drug delivery and related methods

AB Biol. active agent delivery compns., which comprise diketopiperazine carboxylate salts are provided. Related methods for making and using the biol. active agent delivery compns. are also provided. For example, microparticles containing disodium fumaryl diketopiperazine and insulin was fabricated through

spray drying and used to deliver insulin. ACCESSION NUMBER: 2006:170457 CAPLUS

DOCUMENT NUMBER: 144:260796

TITLE: Diketopiperazine salts for drug delivery and

related methods

Leone-Bay, Andrea; Moye-Sherman, Destardi; Wilson, INVENTOR(S):

Bryan R.

Mannkind Corporation, USA PATENT ASSIGNEE (S): SOURCE: U.S. Pat. Appl. Publ., 24 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.				KIN	IND DATE				APPLICATION NO.						DATE		
	2006 2006				A1 A1		2006			US 2					_	0050 0050		
	W:	AE, CN, GE, LC, NG,	AG, CO, GH, LK, NI,	CR, GM, LR, NO,	AM, CU, HR, LS, NZ,	AT, CZ, HU, LT, OM,	AU, DE, ID, LU, PG, TN,	AZ, DK, IL, LV, PH,	BA, DM, IN, MA, PL,	BB, DZ, IS, MD, PT,	BG, EC, JP, MG, RO,	BR, EE, KE, MK, RU,	BW, EG, KG, MN, SC,	BY, ES, KM, MW, SD,	BZ, FI, KP, MX, SE,	CA, GB, KR, MZ, SG,	CH, GD, KZ, NA, SK,	
	RW:	AT, IS, CF, GM,	IT, CG, KE,	BG, LT, CI, LS,	LU, CM,	LV, GA, MZ,	CZ, MC, GN, NA, TM	NL, GQ,	PL, GW,	PT, ML,	RO, MR,	SE, NE,	SI, SN,	SK, TD,	TR, TG,	BF, BW,	BJ, GH,	
PRIORITY	Y APP	LN.	INFO	.:					1	US 2	004-	6037	61P		P 2	0040	823	

OTHER SOURCE(S): MARPAT 144:260796

P 20040823 US 2004-603761P

- L4ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Purification and stabilization of peptide and protein pharmaceutical
- AB Methods are provided for purifying peptides and proteins by incorporating the peptide or protein into a diketopiperazine or competitive complexing agent to facilitate removal of one or more impurities, i.e. undesirable components, from the peptide or protein. In a preferred embodiment, a peptide, such as insulin, containing one or more impurities, e.g. zinc ions, is entrapped in diketopiperazine to form a precipitate of peptide/diketopiperazine/impurity, which is then washed with a solvent for the impurity to be removed, which is a nonsolvent for the diketopiperazine and a nonsolvent for the peptide. Formulations and methods also are provided for the improved transport of active agents across biol. membranes, resulting for example in a rapid increase in blood agent concentration. The formulations include microparticles formed of (i) the active agent, which may be charged or neutral, and (ii) a transport enhancer that masks the charge of the agent and/or that forms hydrogen bonds with the target biol. membrane in order to facilitate transport. In a preferred embodiment, insulin is administered via the pulmonary delivery of microparticles comprising fumaryl diketopiperazine and insulin in its biol. active form. The charge on the insulin mol. is masked by

hydrogen bonding it to the diketopiperazine, thereby enabling the insulin to pass through the target membrane. This method of delivering insulin results in a rapid increase in blood insulin concentration that is comparable to the increase resulting from

i.v. delivery. ACCESSION NUMBER:

2001:12479 CAPLUS

DOCUMENT NUMBER:

134:76414

TITLE:

Purification and stabilization of peptide and protein

pharmaceutical agents

INVENTOR(S):

Steiner, Solomon S.; Woods, Rodney J.; Sulner, Joseph

W

PATENT ASSIGNEE(S):

Pharmaceutical Discovery Corporation, USA

SOURCE:

PCT Int. Appl., 29 pp.

CODEN: PIXXD2 Patent

DOCUMENT TYPE: LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

. 1

PATENT INFORMATION:

PA'	PATENT NO.				KIND DATE			APPLICATION NO.				DATE					
WO	2001 2001 2001	0006	54		A3		2001	0705	,	WO 2	2000-	US17	984		2	0000	629
		CZ, IN, MD, SK, GH,	DE, IS, MG, SL, GM,	DK, JP, MK, TJ, KE,	DM, KE, MN, TM, LS,	EE, KG, MW, TR, MW,	ES, KP, MX, TT, MZ,	FI, KR, NO, TZ, SD,	GB, KZ, NZ, UA, SL,	GD, LC, PL, UG, SZ,	, BR, , GE, , LK, , PT, , UZ,	GH, LR, RO, VN, UG,	GM, LS, RU, YU, ZW,	HR, LT, SD, ZA, AT,	HU, LU, SE, ZW BE,	ID, LV, SG,	IL, MA, SI,
											, LU, , NE,				SE,	BF,	ВJ,
		204 430 AT,	BE,	CH,	AA A2	DK,	2001 2002 ES,	0104 0417	1	CA 2 EP 2	2000-: 2000- , IT,	2377: 9450:	204 09		2	0000	629
JP AU US	6444 2003 7799 2003 6652	226 5034: 86 0136	20 41	·	B1 T2 B2	•		0128 0224 0116		JP 2 AU 2	2000- 2001- 2000- 2002-	5070 5901	61 0		2	0000 0000 0000 0020	629 629
	2004 2005 Y APP	2022	30				2004 2005			AU 2 US 3 US 2 WO 2	2003- 2005- 1999- 2000- 2000- 2002-	2022 1414 6064 US17	30 33P 68 984] 2	2 P 1 A3 2	0000 0000	523 629 629 629

L5 ANSWER 1 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN

TI Diketopiperazine salts for drug delivery and related methods

AB Biol. active agent delivery compns., which comprise diketopiperazine carboxylate salts are provided. Related methods for making and using the biol. active agent delivery compns. are also provided. For example, microparticles containing disodium fumaryl diketopiperazine and insulin was fabricated through spray drying and used to deliver insulin.

ACCESSION NUMBER: 2006:170457 CAPLUS

DOCUMENT NUMBER: 144:260796

TITLE: Diketopiperazine salts for drug delivery and

related methods

INVENTOR(S): Leone-Bay, Andrea; Moye-Sherman, Destardi; Wilson,

Bryan R.

PATENT ASSIGNEE(S): Mannkind Corporation, USA SOURCE: U.S. Pat. Appl. Publ., 24 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND I	DATE	APPLICATION NO.	DATE
US 2006040953	A1 2	20060223	US 2005-210710	20050823
WO 2006023943	A1 2	20060302	WO 2005-US30026	20050823
W: AE, AG, AL,	AM, AT,	AU, AZ,	BA, BB, BG, BR, BW, BY,	BZ, CA, CH,
CN, CO, CR,	CU, CZ,	DE, DK,	DM, DZ, EC, EE, EG, ES,	FI, GB, GD,
GE, GH, GM,	HR, HU,	ID, IL,	IN, IS, JP, KE, KG, KM,	KP, KR, KZ,
LC, LK, LR,	LS, LT,	LU, LV,	MA, MD, MG, MK, MN, MW,	MX, MZ, NA,
NG, NI, NO,	NZ, OM,	PG, PH,	PL, PT, RO, RU, SC, SD,	SE, SG, SK,
SL, SM, SY,	TJ, TM,	TN, TR,	TT, TZ, UA, UG, US, UZ,	VC, VN, YU,
ZA, ZM, ZW				
RW: AT, BE, BG,	CH, CY,	CZ, DE,	DK, EE, ES, FI, FR, GB,	GR, HU, IE,
IS, IT, LT,	LU, LV,	MC, NL,	PL, PT, RO, SE, SI, SK,	TR, BF, BJ,
CF, CG, CI,	CM, GA,	GN, GQ,	GW, ML, MR, NE, SN, TD,	TG, BW, GH,
GM, KE, LS,	MW, MZ,	NA, SD,	SL, SZ, TZ, UG, ZM, ZW,	AM, AZ, BY,
KG, KZ, MD,	RU, TJ,	TM		

PRIORITY APPLN. INFO.: US 2004-603761P P 20040823 OTHER SOURCE(S): MARPAT 144:260796

L5 ANSWER 2 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN

TI Method of reducing serum proinsulin levels in type 2 diabetics

AB Methods are provided for reducing serum proinsulin levels, lessening post-prandial pancreatic stress, and reducing risk factors for atherosclerosis in subjects with diabetes mellitus, type 2. The method includes administration of insulin in a manner that mimics the meal-related first phase insulin response, using a dose sufficient to reduce serum levels of proinsulin. In some embodiments of the method insulin administration is commenced early in the course of the disease. Mimicking first phase kinetics, peak serum insulin levels can be reached within about 18 min of administration. In increasingly preferred embodiments peak serum insulin levels can be reached within about 15, 12, or 10 min of administration. Serum insulin levels return to baseline within about two hours of administration. The invention relates to administration of insulin by pulmonary delivery using synthetic biodegradable polymeric or diketopiperazine microparticles incorporating the insulin.

ACCESSION NUMBER: 2005:614581 CAPLUS

DOCUMENT NUMBER: 143:71798

TITLE: Method of reducing serum proinsulin levels in type 2

diabetics

INVENTOR(S): Cheatham, Wayman Wendell; Boss, Anders Hasager;

Pfuetzner, Andreas Mannkind Corp., USA

PATENT ASSIGNEE(S): Mannkind Corp., USA SOURCE: U.S. Pat. Appl. Publ., 6 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					KIND DATE			APPLICATION NO.					DATE			
US	JS 2005153874			A1 20050714			US 2005-32278						20050110				
WO	0 2005067964			A1 20050728		WO 2005-US596						20050110					
	W:	AE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,
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		NO,	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
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	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
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		MR,	NE,	SN,	TD,	ΤG											
PRIORIT	RIORITY APPLN. INFO.:									US 2	004-	5359	45P		P 2	0040	112

L5 ANSWER 11 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN

TI Purification and stabilization of peptide and protein pharmaceutical agents

AΒ Methods are provided for purifying peptides and proteins by incorporating the peptide or protein into a diketopiperazine or competitive complexing agent to facilitate removal of one or more impurities, i.e. undesirable components, from the peptide or protein. In a preferred embodiment, a peptide, such as insulin, containing one or more impurities, e.g. zinc ions, is entrapped in diketopiperazine to form a precipitate of peptide/diketopiperazine/impurity, which is then washed with a solvent for the impurity to be removed, which is a nonsolvent for the diketopiperazine and a nonsolvent for the peptide. Formulations and methods also are provided for the improved transport of active agents across biol. membranes, resulting for example in a rapid increase in blood agent concentration. The formulations include microparticles formed of (i) the active agent, which may be charged or neutral, and (ii) a transport enhancer that masks the charge of the agent and/or that forms hydrogen bonds with the target biol. membrane in order to facilitate transport. In a preferred embodiment, insulin is administered via the pulmonary delivery of microparticles comprising fumaryl diketopiperazine and insulin in its biol. active form. The charge on the insulin mol. is masked by hydrogen bonding it to the diketopiperazine, thereby enabling the insulin to pass through the target membrane. This method of delivering insulin results in a rapid increase in blood insulin concentration that is comparable to the increase resulting from i.v. delivery.

ACCESSION NUMBER: 2001:12479 CAPLUS

DOCUMENT NUMBER: 134:76414

TITLE: Purification and stabilization of peptide and protein

pharmaceutical agents

INVENTOR(S): Steiner, Solomon S.; Woods, Rodney J.; Sulner, Joseph

W.

PATENT ASSIGNEE(S): Pharmaceutical Discovery Corporation, USA

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	PATENT NO.								APPLICATION NO.						DATE		
WO	WO 2001000654 WO 2001000654 WO 2001000654				A2 20010104 A3 20010705		WO 2000-US17984						20000629				
	W: RW:	CZ, IN, MD, SK, GH,	DE, IS, MG, SL, GM,	DK, JP, MK, TJ, KE,	DM, KE, MN, TM, LS,	EE, KG, MW, TR, MW,	ES, KP, MX, TT, MZ,	FI, KR, NO, TZ, SD,	GB, KZ, NZ, UA, SL,	GD LC PL UG SZ	, BR, , GE, , LK, , PT, , UZ, , TZ,	GH, LR, RO, VN, UG,	GM, LS, RU, YU, ZW,	HR, LT, SD, ZA, AT,	HU, LU, SE, ZW BE,	ID, LV, SG,	IL, MA, SI,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR	, LU, , NE,	SN,	TD,	TG			•
		430			A2		2002	0417		EP :	2000-1 2000-1	9450	09		2	0000	629
		ΙE,	SI,	LT,	LV,	FI,	RO				, IT,						
	US 6444226 JP 2003503420				B1 T2	2 20030128				US 2000-606468 JP 2001-507061							
AU US	7799 2003	86 0136	41		B2 A1		2005 2003	0224 0116		AU :	2000- 2002-	5901	0		2	0000	629
US	6652 2004 2005	0775	28					0422		US :	2003- 2005-:	7197 2022	34 30		2	0031 0050	
PRIORITY									,	US US : WO :	1999- 2000- 2000- 2002-	1414 6064 US17	33P 68 984	; 1	P 1 A3 2 W 2	0000	629 629

- L5ANSWER 18 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
- ΤT Method for making self-assembling diketopiperazine drug delivery system
- AB Drug delivery systems are developed based on the formation of diketopiperazine (or analogs) microparticles. In the preferred embodiment, the microparticle is stable at low pH, disintegrates at physiol. pH, and is particularly useful for oral drug delivery. In other embodiments, the microparticles are stable at high pH and disintegrate at neutral or basic pH, or are stable at neutral pH and disintegrate at high or low pH. In the most preferred embodiment the microparticles are formed in the presence of the drug to be delivered, for example, insulin , felbamate, calcitonin, or heparin. The diketopiperazine synthetic intermediates are preferably formed by cyclodimerization to form diketopiperazine derivs. at elevated temps. under dehydrating conditions, functionalized on the side chains, and then precipitated with drugs to be incorporated into microparticles. Felbamate was encapsulated in 2,5-diketo-3,6-di(4-fumarylaminobutyl)piperazine (I) by adding 1.6 g of jet-milled, micronized felbamate to 320 mL of a 0.5% solution of Na lauryl sulfate in 0.1 M NaHCO3 solution and then adding 4 g of I to the suspension.

ACCESSION NUMBER:

1996:256816 CAPLUS

DOCUMENT NUMBER:

124:352756

TITLE:

Method for making self-assembling diketopiperazine drug delivery system

INVENTOR(S):

Steiner, Solomon S.; Rhodes, Christopher A.; Shen,

Gregory S.; Mccabe, R. Tyler

PATENT ASSIGNEE(S): SOURCE:

Pharmaceutical Discovery Corporation, USA U.S., 20 pp., Cont.-in-part of U.S. 5,352,461.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5503852	A	19960402	US 1994-299842	19940901
US 5352461	A	19941004	US 1992-849186	19920311
AT 132744	E	19960115	AT 1993-920574	19930311
ES 2089844 ·	Т3	19961001	ES 1993-920574	19930311
PRIORITY APPLN. INFO.:			US 1992-849186 A2	19920311
OTHER SOURCE(S):	MARPAT	124:352756		

- L_5 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2006 ACS on STN
- TTSelf-assembling diketopiperazine drug delivery system
- AB Drug delivery systems based on the formation of diketopiperazine or analog microparticles are developed. The microparticles are stable at low pH and are disintegrated at physiol. pH. Thus, 2,5-diketo-3,6-di(4aminobutyl)piperazine (preparation is given) was succinylated with succinic anhydride in alkaline solution to obtain 2,5-diketo-3,6-di(4succinylaminobutyl)piperazine (I) which was rapidly acidified with citric acid at pH=2.2 to sep. I as microparticles. Porcine insulin (II) was encapsulated in I by dissolving I in a saturated NaHCO3 solution and
- mixing this solution with an equal volume of 1M citric acid soln containing II

concentration of 20mqII/mL. Rats were given 1mL oral encapsulated II suspension

at a concentration of 10mg/kg of body weight Encapsulated I produced a marked .

in blood glucose level as compared with amorphous precipitate solution of I and II

which failed to do so.

ACCESSION NUMBER:

DOCUMENT NUMBER:

1993:656544 CAPLUS

119:256544

TITLE:

Self-assembling diketopiperazine drug

delivery system

INVENTOR(S):

Feldstein, Robert; Glass, John; Steiner, Solomon S.

PATENT ASSIGNEE(S):

Pharmaceutical Discovery Corp., USA

SOURCE:

PCT Int. Appl., 32 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

E	PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
V	VO 9318754 W: AU,		A1	19930930	WO 1993-US2245	19930311
	·	•	DE, DK	, ES, FR,	GB, GR, IE, IT, LU,	MC, NL, PT, SE
į	JS 5352461	, ,	A		US 1992-849186	
F	AU 9338044		A1	19931021	AU 1993-38044	19930311
F	AU 680408		B2	19970731		
E	EP 630236		A1	19941228	EP 1993-920574	19930311
E	EP 630236		В1	19960110		
	R: AT,	BE, CH,	DE, DK	, ES, FR,	GB, GR, IE, IT, LI,	LU, MC, NL, PT, SE
	JP 07506818		Т2	19950727	JP 1993-516624	19930311
F	AT 132744		E	19960115	AT 1993-920574	19930311
Е	ES 2089844		Т3	19961001	ES 1993-920574	19930311
	CA 2131366		С	20030923	CA 1993-2131366	19930311
PRIORI	TTY APPLN. :	INFO.:			US 1992-849186	A 19920311
					WO 1993-US2245	A 19930311
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OTHER SOURCE(S):

MARPAT 119:256544